

The above notes were taken from living specimens.

It would be interesting to know more than is known at present about the distribution of the British Ephemeridæ. In Dorset and on Dartmoor *Potamanthus erythrophthalmus* is the commonest of the genus, whilst *P. marginatus* is the most frequent in the Cambridge district. On the Dart *Baëtis montana* predominates, but *B. lutea* at Little Bridy, Dorset. At this last place, too, *Cloëon Rhodani* outnumbers *C. bioculatum*; but at Blandford, in the same county, and at Cambridge the converse obtains. From this it would appear that *P. erythrophthalmus* and *C. Rhodani* are better fitted to inhabit swift streams than *P. marginatus* and *C. bioculatum*.

XXV.—On the Dentition of *Thylacoleo carnifex* (Ow.).

By GERARD KREFFT.

[Plate XI.]

To the Editors of the *Annals and Magazine of Natural History*.

GENTLEMEN,

In the December Number of your Journal you figure a tooth which is supposed by Prof. M'Coy to be the hitherto unknown canine of *Thylacoleo carnifex*, because it was discovered "with part of the lower jaw and teeth of *Nototherium Mitchelli*, on which it had probably been feeding." I do not think the finding of such a tooth in proximity with a *Nototherium's* teeth is sufficient proof that it belonged to a *Thylacoleo*, the more so as the huge canine of that animal had never been known before—and *never will be known*, because the *Thylacoleo carnifex* was not furnished with canine teeth, and the dental series (in the lower jaw at least) ended in a pair of incisors, from which fact I venture to conclude (guided by the analogy furnished by the dentition of our living Marsupials with two lower incisors, the wombat excepted) that the upper jaw contained the usual six incisor teeth, and that if it ever possessed a canine it must have been a very small one, corresponding to the diminished tooth found in *Hypsiprymnus* and *Phalangista*.

The tooth described by Prof. M'Coy is not referable to *Thylacoleo*; and the shape of its crown proves it at once to be an incisor, *not a canine*, and most likely the (incisor) tooth of the animal with the remains of which it was discovered. Prof. Owen (who long ago expressed his opinion to the effect that the dental series of the lower jaw of *Thylacoleo* would probably end in a pair of incisors) has given us a full description of the teeth of this animal, to which I have nothing to add, except that, with the scanty material at my disposal, I have ventured to recon-

struct the skull and dentition of this famous marsupial lion (Plate XI. fig. 1), which, in my opinion, was not much more carnivorous than the Phalangers of the present time.

I also enclose drawings of sections of

Lower incisor of	<i>Thylacoleo</i> . . .	Fig. 2.
„	„	<i>Nototherium</i> .. Fig. 3.
„	„	<i>Diprotodon</i> .. Fig. 4.
„	„	<i>Thylacine</i> . . . Fig. 5.
„	„	<i>Sarcophilus</i> .. Fig. 6.
Upper incisor of	<i>Felis tigris</i> ..	Fig. 7.
Lower	„	„ Fig. 8.

showing the relative size of the teeth in these animals, and proving sufficiently that the *Thylacoleo* was far inferior in strength to a modern tiger, and no match for ponderous Diprotodons and Nototheriums. The scale of the photographed fractions is in inches, the sections are of the natural size.

I remain, Gentlemen,

Your most obedient Servant,

GERARD KREFFT,

Curator and Secretary.

Australian Museum, Sydney.

May 24, 1866.

XXVI.—On *Two European Argulidæ*, with Remarks on the *Morphology of the Argulidæ and their Systematic Position, together with a Review of the Species of the Family at present known.* By T. THORELL*.

AMONG the various groups which, during the last few years, have attracted the special attention of zoologists, the small Crustacean family of the Argulidæ holds a prominent place. Long represented by one species only, which is common throughout a great part of Europe, and was already, before the time of Linnæus, known as *Argulus foliaceus*, this remarkable family has, in the course of the last thirty years, received a sudden and unexpected accession to the number of its species. Kröyer†, whose writings are the most recent upon the animals composing it, gives the number of known species as thirteen, of which eight have been described since the beginning of the year 1857, and amongst these the three species which constitute Heller's American genus *Gyropeltis*. Of these thirteen Argulidæ, one (*A. giganteus*) belongs to Africa, and one only (*A. foliaceus*) also to Europe; the remaining eleven are all from America.

* Translated, by A. O'Shaughnessy, from the *Œfvers. af Kongl. Vetensk.-Akad. Förhandlingar*, 21st series, Stockholm, 1864 (communicated 9th Dec. 1863).

† "Bidrag til Kundskab om Snyltekrebsene," *Naturhistorisk Tidsskrift*, 3die Række, Bd. ii. (1863) p. 85.